AMENDMENTS TO THE CLAIMS

Original claims 1, 15, 27 and 35 were previously canceled without prejudice.

Claims 2-4, 7, 9, 12, 16, 18-19, 22, 24, 28-30, 32, 34, 36,38, 40 and 41 were previously amended.

Claims 5, 6, 10, 11, 13, 14, 17, 20, 21, 25, 26, 31, 33, 37 and 39 are unamended original claims.

Claims amended with this response are as follows:

8. (Currently Amended) An apparatus for measuring a parameter of interest of a material in a subterranean formation, the apparatus comprising:

(a) a cylindrical enclosure for enclosing the material;

(b) at least one transmitter having an antenna on the inside of the cylindrical enclosure for propagating electromagnetic radiation in the material at at least two frequencies;

(c) at least one receiver having an antenna on the inside of the cylindrical enclosure <u>axially displaced from the at least one transmitter</u> for measuring electromagnetic radiation in the material at each of the at least two frequencies, the measurements indicative of the parameter of interest;

(d) a core bit operatively coupled to the cylindrical enclosure for separating the material from the subterranean formation; and

(e) a drilling tubular for conveying the cylindrical enclosure into a borehole in the subterranean formation wherein the drilling tubular is selected from the group consisting of (A) a drill string and (B) a coiled tubing.

23. (Currently Amended) A method for determining a parameter of interest of a material comprising:

(a) operatively coupling a core bit to a cylindrical enclosure;

(b) conveying the cylindrical enclosure into a borehole in a subterranean formation on a drilling tubular selected from the group consisting of (A) a drill string and (B) a coiled

tubing;

(c) operating the core bit for separating the material from the subterranean formation;

(d) enclosing the material in the cylindrical enclosure;

(e) inducing electromagnetic radiation in the material using at least one transmitter antenna on the inside of the cylindrical enclosure transmitting at least two frequencies; and

(f) measuring with at least one receiver antenna axially disposed from the at least one transmitter the induced electromagnetic radiation in the material at each of the frequencies, the measurements indicative of the parameter of interest.